

2019-09-23-25 ONS at Antwerp, Belgium Policy Framework Demonstration

Policy goes mainstream, leveraging TOSCA and Kubernetes to build & deploy network policies

The architecture and the implementation of the ONAP Policy Framework was substantially upgraded in the ONAP Dublin release.

In this demo, we present the evolved ONAP Policy Framework discussing the most important improvements and describing the evolved Policy Framework architecture.

The framework is generic, extendable, scalable and can be used in ONAP or standalone outside ONAP.

We highlight the power of TOSCA Policy Types (configuration templates) and how they can be used to build translation applications (setting up closed loop policies).

We will also present the new components of Policy framework using a Kubernetes deployment of ONAP.

And then finally show a demo of creating & deploying policy in a pdp engine using the new architecture.

Policy Architecture

<https://onap.readthedocs.io/en/latest/submodules/policy/parent.git/docs/architecture/architecture.html#architecture>

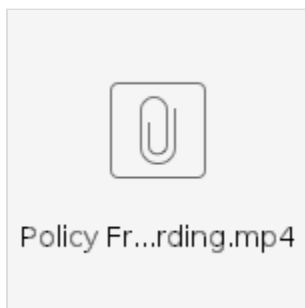
Policy Design

<https://onap.readthedocs.io/en/latest/submodules/policy/parent.git/docs/design/design.html#introduction>

Examples of Tosca Policy Types

<https://github.com/onap/policy-models/tree/master/models-examples/src/main/resources>

Demo OOM Installation of Policy Framework Components



Postman collection used in the demo



Building Policy Applications for various PDP Engines

- Apex PDP Applications
- Drools PDP Applications
- XACML PDP Applications

Demo of API's

- Policy Type and Policy CRUD API
- PDP Group API
- Policy Deployment API
- Decision API

Future Roadmap

- Finishing upgrade of other ONAP clients supporting the new policy design, api's and framework.
 - OOF for placement
 - SO for scaling
 - SDNC for naming policies
- Monitoring – better ability to monitor the running policies and PDP's.
- Policy Update Notification – updates to client applications when policies are created, updated, or deleted.
- Support for raw policies – support for raw PDP engine policies.
- Policy Distribution – to support automated policy creation via service distribution from SDC.

Background of Booth Presenters

- Ajith Sreekumar
- Liam Fallon
- Pamela Dragosh
- Ram Krishna Verma - Actively contributing in ONAP Policy Framework since Beijing release. Also, a committer in the project since Dublin release.

	Monday	Tuesday	Wednesday
7:30am			

8:00am			
8:30am			
9:00am		KEYNOTE	KEYNOTE
9:30am		KEYNOTE	KEYNOTE
10:00am		KEYNOTE	KEYNOTE
10:30am		KEYNOTE	KEYNOTE
11:00am		Pam	
11:30am		Pam	
12:00pm	Pam	Pam	Ajith
12:30pm	Pam		
1:00pm			
1:30pm	KEYNOTE	Pam Ajith	
2:00pm	KEYNOTE	Pam Ajith	Ajith
2:30pm	KEYNOTE	Pam Liam Ram Ajith	
3:00pm	Pam		
3:30pm	Pam		Ajith
4:00pm	Ajith(4.15-4.45)		
4:30pm		Ajith	TEARDOWN
5:00pm		TECH SHOWCASE Pam	
6:00pm		TECH SHOWCASE Pam	
7:00pm		TECH SHOWCASE Pam	